

1. (Amended). A process for preparing a library of DNA fragments of which terminal sequences are known by using a DNA of which base sequence is completely unidentified, which comprises:

i) digesting a DNA into fragments which have single-strand cohesive ends by using a restriction enzyme,

ii) preparing a series of hairpin loop adapters which have single-strand cohesive ends of which base sequence is known;

iii) ligating the DNA fragments with the hairpin loop adapters prepared in the above step ii) by using a DNA ligase; and

iv) eliminating a hair pin loop structure only from the DNA fragments which contain the hairpin loop adapters, obtained in step iii), by using an alkaline solution, an RNase or a single strand specific exonuclease.

3. (Amended) A process for selective amplifying DNA of which base sequence is completely unidentified, which comprises:

i) digesting a DNA into fragments which have a single-strand cohesive end group by using a restriction enzyme,

ii) preparing hairpin loop adaptors which have the single-strand cohesive end which can be complementarily combined to and ligated on the both ends of the DNA fragments obtained in step i);

iii) ligating the DNA fragments with the hairpin loop adapters thus prepared by using a DNA ligase;

iv) removing DNA fragments and hairpin loop adapters which have not participated in the ligation reaction by using an exonuclease;

v) eliminating a hairpin loop structure from the DNA fragments on which said hairpin loop adapters are ligated in step iii); and